2.0 Executive Summary

“In hospitals, the built environment is the most objective and visible sign of respect for the patient, family and staff”

f: Leonard L. Berry, “Discovering the Soul of Service”
New York: The Free Press, 1999

2.1 Introduction

The Anshen+Allen Team was appointed by St James’s Hospital in March 2006 to develop an Outline Development Control Plan (ODCP) for the hospital campus. This plan was defined in the Hospital’s Brief as “a comprehensive location blueprint within which the Hospital will effect its known planned development programme over the coming years”.

The brief defined a number of known planned developments, which were categorised as ‘Primary Strategic Developments’, ‘Medium/Minor Operational/Service Developments’, and ‘Collaborative Developments with External Agencies’. The constituent elements of each development are described in greater detail in Section 3.0 Brief of this report.

This ambitious programme will develop two new major centres of clinical excellence, a private hospital and a maternity hospital and commence a comprehensive redevelopment of the hospital’s estate. The volume of new clinical accommodation demands a restructuring and reorganisation of the site. On completion, the reconfigured St James’s site will present a well-planned and ordered hospital campus in which clinical activities are zoned, circulation is segregated and legible, and sites are made ready for future development.

This will reinforce St. James’s clinical status as a national centre for secondary and quaternary healthcare operating from an ordered and well-planned medical campus in the heart of Dublin. The ODCP also addresses other key objectives in the brief:

- To allow for the further expansion of existing and proposed facilities as defined in the Brief.
- To develop the campus to its fullest potential, in such a manner as to maximise density and site coverage
- To significantly improve the environmental provisions on the campus

Fig 2.1: Aerial photograph of site
St James’s Hospital has been a significant institution in the city of Dublin for almost three hundred years. From its origins as a Foundling Hospital in 1727 to its present position as a 950-Bed Academic Teaching Hospital, the largest in the Republic of Ireland, St James’s has developed its reputation as a national centre of excellence for medical care, research and education. The Hospital’s mission states: “When you come to St James’s Hospital, you will experience excellence from people who are leading the way in integrated and innovative healthcare”.

St James’s is a key shaper and instrument of public policy in the health system, established through a fusion of a number of voluntary hospitals and a single municipal hospital. The hospital’s mission derives from its core philosophies and values and is defined as follows:

- The hospital’s fundamental purpose is the diagnosis of illness, the delivery of health treatment and care, as well as health promotion and preventative services at catchment, regional, supra-regional and national levels. Its services remit ranges in complexity from secondary to quaternary level.
- St James’s is an academic teaching hospital committed to the creation of an environment and the circumstances in which education and research in the health sciences and allied areas is possible and flourishes. It is the primary hospital associated with Trinity College Dublin, with university teaching and research facilities on site.

Whilst clinical care at St James’s has become increasingly sophisticated, the Hospital’s estate has not kept pace. Although new facilities have been developed in recent decades, some clinical activity is still accommodated in a number of older, eighteenth and nineteenth century buildings, which are no longer fit for purpose. The more recent buildings, whilst providing a greatly improved patient environment, are generally low rise and low density, do not optimise site coverage, nor segregate internal traffic flows.

Furthermore, whereas the original Foundling Hospital had a prominent frontage onto James’s Street, as the hospital has evolved over the years, the campus has become more introspective. There is little linkage, either physical or visual, between the hospital and its locality - the centre of Dublin City to the north and east and the residential communities to the south and west.

Fig 2.2: Location Plan: Dublin
2.3 Enhancing the Hospital Campus

The St. James’s Hospital campus is an excellent location in Dublin from which to provide a national clinical service. It is readily accessible from Dublin airport, is well connected to national rail links, in particular Heuston station which is being developed as a key transport hub, and will benefit hugely from the proposed extension of the LUAS tram system and the introduction of the Metro rail linking the airport to the City Centre. It is also situated in an area of Dublin which is beginning to undergo significant change. The nearby Fatima Mansions residential redevelopment is already underway, and the St. James’s brewery is almost certain to undergo partial or comprehensive redevelopment within the next decade, which will provide further unique opportunities for urban regeneration. Dublin City Council is currently reviewing proposals for the redevelopment of a number of other existing residential estates, and vacant or cleared sites in close proximity to St. James’s.

St James’s Hospital is a national healthcare and academic institution. As a responsible developer of its considerable estate the hospital must be able to participate in the current debate about the future of this significant quarter of Dublin City, the substance and form of the redeveloped neighbourhood, contributing to and benefiting from regeneration.

2.4 Development Strategy

The Outline Development Control Plan (ODCP) answers the brief in providing a physical framework within which the hospital can enhance its existing estate and develop major new facilities in an orderly fashion. The strategy will also allow the Hospital flexibility in responding to project specific funding streams. This approach is based on investing in a limited programme of enabling works, which will allow the development of three major sites, either sequentially or in a single operation. This physical framework not only facilitates clinical development but also will provide a structured campus that anticipates future phases of activity to achieve the future vision for St James’s, as described in more detail below.

The ODCP proposes a new central boulevard, which extends through the hospital site, connecting the two principal site entrances and acting as an ordering device for the site. Entrances to existing and new buildings will be arranged along this artery, benefiting wayfinding and providing a hierarchy of movement across the site.

Clinical accommodation on the campus has been re-ordered to clearly zone activity into “hot”, “cold” and support zones, i.e. an emergency / acute zone, an ambulatory care zone, specific sites for specialist clinical activity such as Radiation Oncology, the Private Hospital and more residential type accommodation, and designated areas for facilities management and support services. However, within this framework, buildings can be designed to optimise patient pathways to utilise opportunities for multi-disciplinary care and sharing of specialist equipment.

The proposed sequencing of development means that three of the major strategic developments - the Radiation Oncology Centre, the Private Hospital and the first phase of the Centre of Excellence for Successful Ageing - can all be achieved in the first phase of construction following completion of enabling works. Furthermore, on completion of the second phase of construction, two-thirds of the planned developments will have been capable of completion. The proposed Maternity Hospital will be developed in the third phase of construction.
The continuing operation of the Hospital during all phases of development is of paramount importance. Careful consideration has been given to the decanting and phasing strategy to ensure that this can be achieved. However, the potential impact of three major construction projects being undertaken simultaneously should not be underestimated, and further detailed appraisals of construction access, contractors’ working compounds and environmental impact will need to be undertaken prior to the commencement of these developments and once there is further certainty with regard to their timing.

A new servicing tunnel is proposed to exploit the basement car parking zones under the new clinical facilities and allow the discrete transfer of goods and waste. This strategy addresses the deficits of the existing servicing arrangements.

The addition of this body of accommodation on an already congested site will pose challenges with respect to maintaining current levels of on-site car parking, and alternative strategies are being explored, including the provision of off-site parking facilities.

### 2.5 The Hospital Environment

There is now significant evidence to demonstrate that a sympathetic hospital environment can improve health outcomes. A good working environment has significant benefits in terms of staff recruitment and retention. In addition, patient expectations have fundamentally changed. A generation of consumers expect the quality of the hospital environment to match the level of clinical care. There is considerable disparity in the type and condition of current patient and staff environments across the St James’s site. The proposed strategic developments will provide the opportunity to redeem this imbalance and catalyse fundamental improvements in the Hospital’s environment.

Currently the developments for which the call for an expression of interest has been advertised are the Haemophilia/Hepatology In-patient facility and the Supra-Regional TB Centre. A design team Etender has been floated for the interim Radiation Oncology building, the PET/CT scan proposed in Hospital 1 and a Government Directive has been established for the Radiation Oncology Centre. St James Hospital have also received a grant from Atlantic Philanthropy for progressing with the Centre of Excellence for Successful Ageing project and the Community Beds project has secured a grant of permission from the Dublin City Council. St James Hospital are currently progressing with a tender bid for the co-located Private Hospital with the HSE.

Details of the current approval and funding status for the key developments are included in Section 3.3 of this report.

### 2.6 Flexibility and Future Awareness

It is essential that the overall site strategy and the individual development projects will provide flexibility in planning and design, and have an inherent capacity to respond to changing clinical practices and advancing technologies.

The development of the Outline Development Control Plan by the Anshen Dyer Team has addressed all of the above issues. A range of options has been identified and appraised, and a preferred option selected and developed in greater detail. We have then looked at the future vision of the St James’s
Hospital campus beyond the scope of the planned developments identified in the ODCP Brief.

2.7  Procurement

It is essential that any development control plan is designed to enable the Hospital to respond to changes in central funding allocation and also allow all the priority projects to be procured by any available mechanism - traditional, design / construct or a public private partnership. A strategy that is predicated on a programme, which is, in turn, based on a specific procurement route is not viable.

The hospital must assess the most advantageous balance in terms of prioritising programming objectives and seeking funding, between securing and developing the priority projects and completing the replacement of the outmoded facilities on its existing estate.

Fig 2.7: Site Zone Diagram
2.8 Engineering Strategies

The strategies contained in the following sections have been developed for the Preferred Option in conjunction with information provided by St James’s Hospital representatives and other third party providers.

- Car Parking and Access
- Engineering Services
- Civil and structural including Geo-environmental
- Fire engineering, Sustainability, Acoustics
- Environmental and Construction methodology
- Health and Safety
- Facilities management

The key strategies relating to the engineering services are as follows, further items are discussed within the main report:

- General engineering services
  - It is proposed that existing engineering services require replacement within the time scale of the development plan due to the age and condition of existing services and their compatibility with the proposed phasing
- Electrical services
  - The current power to site is not capable of sustaining the proposed phased development. Up-rated power supply will be required to suit the phasing for which a new substation is proposed for the later phases.
- Mechanical services
  - Gas and water ring mains replaced to suit the proposed phased development
  - Bulk cold water storage to be relocated to enable the construction of the Facilities Management Centre
  - The principle of centralised generation and distribution of the steam for heating and hot water provision is maintained as existing with upgrade and modification to suit the development of the site
- External drainage
  - The current Dublin City foul water system is at capacity, a new pumping station is proposed to provide capacity for the additional discharge
  - The storm and foul water drainage is replaced to suit the proposed phasing
- Drimnagh sewer
  - The sewer is being diverted locally to make available the proposed site of the Facilities Management Centre during the initial phasing
  - It is proposed that a long term solution to divert the sewer to the pumping station is considered to free up the site for unrestricted future development.

The phased strategies contained within the main body of the report have been restructured on a site by site basis within the Infrastructure Matrix contained as an appendix to this report.

The inter-dependences and key engineering risks of each site have been highlighted in a Risk Review contained as an appendix to this report.

Facilities Management Strategy

The existing facility management strategy provides a conflict between public and facilities routes at surface level. This has dictated the proposal to provide:

- A dedicated facilities management centre accessed independently from the site boundary
- Dedicated routes incorporated into the proposed building basements with service distribution areas
- Underground link crossing the main site access road
- Service routes link into the existing building surface delivery areas

Future development of the ODCP engineering strategies

A proportion of the Architectural and Infrastructure constraints have been based on informal discussion held with statutory authority personnel and other consultees as set out in the report. An inherent risk within the future development of the outline development control plan is that policies and personnel are likely to change over the time frame set out in the plan. The purpose of the discussions has been to mitigate these risks as far as possible.
2.9 Future Vision Beyond the Current ODCP Brief

We have taken the proposals for the strategic development of the St James’s site beyond the completion of the planned development identified in the ODCP brief and illustrated how the campus can be further developed.

The ODCP will allow the hospital to complete the redevelopment of the campus within the proposed development framework.

The completion of the Ambulatory Care Centre for which funding is not, as yet, identified will achieve three important objectives:

- Achieve the co-location of all ambulatory activity, including imaging in a single facility completing the acute/ambulatory configuration
- Enable the acute core of the hospital - the emergency centre, critical care unit, surgical centre and interventional imaging to be redeveloped on the current Outpatient site and within the existing diagnostic and treatment block.
- This will provide St James’s with an opportunity to reconfigure these activities to accommodate anticipated advances in critical care, the blurring of surgery and imaging - “surgology” and the extension of the emergency centre to meet current and anticipated changes in services provision.

The site created by the demolition of the old Private clinic, Technical services, Laundry, Materials Management and Information management buildings along with a potential reprovision of the National Medicines Centre, National Centre for Hereditary Coagulation Disorders and the Hepatology Centre, will result in the creation of a further important development opportunity to expand the Hospital accommodation further into an independent building on the other end of the green Entrance Boulevard.

Considerations about patient dignity and comfort and more importantly, patient safety and bed management, are accelerating the change in inpatient areas from multiple occupation to 100% single bedroom accommodation. This clinical and cultural imperative can be accommodated by the phased redevelopment of the existing ward blocks in one of the final phases in the creation of the new St James’s campus.

An essential component of the brief which the Dublin City Council Planning Department has indicated, is the relationship of the hospital with the Linear Park and its southerly neighbours. The redevelopment of the inpatient areas will create the potential to open up the campus both visually and spatially to the linear park bordering the LUAS line, and address the redeveloped residential area across the park. It is envisaged that by this stage the existing inpatient ward blocks will have reached the end of their life, both in terms of clinical functionality and building life, and can be reprovided as a series of peninsular towers benefiting from the southerly aspect allowing the Linear Park to penetrate into the Hospital campus.

As part of the future vision, the ODCP identifies the potential for the redevelopment of the existing pathology building to create a multi-storey car park, which will alleviate the pressures on parking on the campus following the re-provision of enhanced pathology services accommodation.

This strategy is designed to achieve the hospital’s clinical objectives and also secure a substantive improvement in patient experience.
2.10 Key Issues for Further Consideration

A number of key issues arise from the preparation of this Outline Development Control Plan which are required to be addressed in order to ensure that it is both robust and achievable.

Strategic Funding - Implementation of this plan is predicated on the support of the HSE for combining proposed developments into mixed-use clinical packages which optimise land take and minimise the overall programme. A continuation of small value small scale projects developed opportunistically in response to funding initiatives will jeopardise the priority projects.

Planning Approvals - There are a number of issues that arise from the ODCP option that require further discussion and then agreement with the Dublin City Council Planning Department:

- De-listing of the nineteenth century Garden Hill House. Since any de-listing sets a precedent, the case for their demolition will be made on political grounds and will require careful preparation. In the event of Site C being developed as a future expansion on zone, there is the possibility of retaining Garden Hill House on site.
- The potential for de-listing and demolition of Hospital 4 needs to be explored, albeit this site is currently identified for potential future expansion. The Hospital 1 and 2 buildings, also listed, are currently shown as being retained, although it is acknowledged that they will require significant modification externally (particularly on their north face) and internally, to render them suitable for their proposed usages.
- The massing and height of the proposed Facilities Management Centre and the Private Hospital.
- The proposed access to the new Facilities Management Centre from the public highway.

All these issues are discussed in greater detail in Section 7 of this report.

Car Parking - the scale of the proposed developments will inevitably reduce the current number of onsite parking spaces during the construction phases. The detailed strategy set out in Section 6 demonstrates that on completion of these developments it is possible to provide the current level of parking, approximately 1500 spaces.

The shortfall during construction can only be made good during the lengthy development programme by identifying an off site parking solution and perhaps combining this with a Park and Ride scheme. This constitutes a risk which must be addressed by both St James’s Hospital and Dublin City Council.
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Fig 2.10ii: Proposed Site Plan Future Vision Option 6